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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/076,600

02/15/2002

Chi Wu

LIGHT1420-1(1421)

9751

25548

7590

06/23/2004

MARK M. TAKAHASHI
GRAY CARY WARE & FREIDENRICH, LLP
4365 EXECUTIVE DRIVE, SUITE 1100
SAN DIEGO, CA 92121-2133

EXAMINER

HEALY, BRIAN

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/076,600	WU, CHI	
	Examiner	Art Unit	
	Brian M. Healy	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-99 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47-61 is/are allowed.
- 6) ☒ Claim(s) 1-46 and 62-99 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>06212004</u> . | 6) <input type="checkbox"/> Other: <u>Brian M. Healy</u> |

ALLOWABLE SUBJECT MATTER

Claims 1-46 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 as is set forth in the office action below. None of the recited references of record teaches or suggests an optical switch with the specific structural details recited in claims 1-46.

Claims 47-61 are allowed over the prior art of record. None of the references of record teaches or suggests an optical switch with the specific structural details which are recited in claims 47-61.

112 REJECTIONS

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is labeled as an "optic switch", however there is nothing in the body of the claim, i.e. after the word "comprising" which specifically points out and distinctly claims a switching means which makes light switching possible. Independent claims 18 and 26 are rejected for the same reasons as claim 1. Dependent claims 2-17, 19-25 and 27-35 are rejected as being inclusive of independent claims 1, 18 and 26. In claim 36, lines 1-6, Applicant recites "An optical switch comprising:.....a plurality of active output waveguides..ect." however this claim recitation is vague and indefinite because there is no input waveguide or input means in order to perform

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switching. A switch, by nature and definition, includes at least one input and one output.

Dependent claims 37-46 are inclusive of the limitations of claim 36 and are also rejected.

102 REJECTIONS

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 62-99 are rejected under 35 U.S.C. 102(b) as being anticipated by Koren et. al., U.S.P. No.5,889,898.

Koren et. al. teaches (Figs.1-7) an optical switch architecture array with reduced cross taly and method of utilizing same comprising: a plurality of output waveguides 14-1,14-2 attached to an inout waveguide 24 and a common waveguide 27,26 with the waveguides also including switching/modulating means 34-1,34-2,36-1,36-2 with further cascading output optical waveguides 52,54 and further attached to at least four output optical waveguides 60-1,60-2 with switching modulating means 62-1-62-2. The waveguides can be mounted upon a substrate means 20. The use of light detectors or sensors is inherent to the terminal ends of Koren et. al.,

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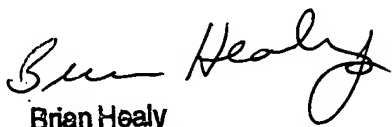
even if this feature is not expressly shown in the Figures. The teachings of Koren et. al. 898' clearly, fully meets Applicant's claimed limitations.

Any inquiry concerning the merits of this communication should be directed to Examiner Brian M. Healy Examiner at telephone number (571) 247-2347. The Examiner's normal work schedule is Tuesday through Friday, 7:00AM to 4:00 PM. Any inquiry of a general or clerical nature (i.e. a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at telephone number (703) 308-0956, to the technical support staff supervisor (Team 2) at telephone number (703) 308-3072, or to the Technology Center 2800 Customer Service Office at telephone number (703) 306-3329.

BRIAN M. HEALY
Primary Patent Examiner
Group Art Unit 2874

The following references are also cited as being pertinent prior art: Wang et. al;., U.S.Patent Application Publication. No. US 2003/0067676A1 (Figs.1-34), Vinchant, U.S.P. No.5,706,374 (Figs.1-8) and Veldhuis et. al., U.S.P. No.6,377,716 (Figs.1-3).

All of the prior art documents submitted by applicant in the Information Disclosure Statement filed on 02/15/2002, have been considered and made of record. Note the attached initialed copy of form PTO-1449.


Brian Healy
Primary Examiner